

#### ABSTRACT

A roughness of an outer ring raceway surface 14 formed on an inner peripheral surface of an outer ring 13 is made larger than a roughness of inner ring raceway surfaces 12a, 12b of an inner ring 11. Also, an average roughness  $R_a$  of the outer ring raceway surface 14 is set within  $0.1 \mu\text{m} \leq R_a \leq 0.5 \mu\text{m}$  in an axial direction and a circumferential direction in ranges of  $b_1/(B/2) \leq 0.9$ ,  $b_2/(B/2) \leq 0.9$  and in a measured length of 0.1 mm to 1.0 mm where  $B$  is a width of the outer ring 13 and  $b_1$ ,  $b_2$  are a distance from both end surfaces of the outer ring 13 in the axial direction respectively. A roughness parameter  $S$  of the outer ring raceway surface is set within  $0 < S \leq 20 \mu\text{m}$ .